

shp 25/04

# Work Order ID 68591



Monday, April 18, 2011 10:13:18 AM

Item ID: D350-689-017

Accept



Setup Start



Revision ID:

Stop



Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 4/19/2011 Start Qty: 3.00



Cust Item ID:

Required Date: 4/22/2011 Req'd Qty: 3.00



Customer:

Reference:

Run Start



Approvals: Process Plan: *[Signature]*

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI 9499	A								

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-689-017 CHG001

*Sulou/15*

110

0.00



Pick Kit

Packaging

Memo

0.00

Packaging

*Pen/4/18 (3)*

120

0.00



QC4- 100% Inspect kits for completeness

QC

Memo

0.00

Quality Control

*Sulou/15*

*(X3)*

**Work Order ID 68591**

Monday, April 18, 2011 10:13:18 AM



Page 2

Item ID: D350-689-017

Accept



Setup Start



Revision ID:

Stop



Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 4/19/2011 Start Qty: 3.00



Cust Item ID:

Required Date: 4/22/2011 Req'd Qty: 3.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-689-017 Location: <u>Draft 50</u> PPP Rev: <u>Draft 50</u>								
140 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

11/4/2011

11/4/2011

11-04-20  
(3)

# Picklist Print

Monday, April 18, 2011 10:13:15 AM

Page 1

Work Order ID: 68591

Parent Item: D350-689-017

Parent Item Name: Shoulder Harness (4 point inertia reel)





Start Date: 4/19/2011

Required Date: 4/22/2011

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP Rev:A new issue DD 10.04.23 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN5-4A  Bolt		Purchased	No			110	Each	96.0000	2	6 ✓			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST337				96					
				108408				96		108408 (K6)			
D4071-041  Shoulder Harness Assembly		Manufactured	No			110	Each	8.0000	2	6 ✓			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST267				8					
				60941				8		60941			
MS21042L5  Nut		Purchased	No			110	Each	737.0000	2	6 ✓			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST300				737					
				115594				1		116105			
				116105				476					
				116548				260					
NAS1149D0516J  Washer		Purchased	No			110	Each	179.0000	4	12 ✓			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST298				179					
				114797				179		114797			

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV 0

REF TCCA STC: SH02-33

REF FAA STC: SR01620NY

REF EASA STC: EASA.IM.R.S.01453

REF BRAZILIAN STC: 2005S03-09

REFERENCE ONLY

## PURPOSE:

TO PROVIDE AN OPTIONAL SHOULDER HARNESS KIT TO BE INSTALLED ON THE D350-689-011/-021 DUAL HIGH BACK SEAT INSTALLATIONS.

## CHANGE:

ADD OPTIONAL D350-689-017 SHOULDER HARNESS KIT (4 POINT INERTIA REEL) TO PARTS LIST OF IIN-D350-689 REV A AND ICA-D350-689 REV 0 AS DETAILED BELOW.

## PARTS LIST:

Qty -017	Part Number	Description
X	D350-689-017	SHOULDER HARNESS KIT (4 POINT INERTIA REEL)
2	D4071-041	SHOULDER HARNESS ASSY
2	AN5-4A	BOLT
4	NAS1149D0516J	WASHER
2	MS21042L5	NUT (OR MS21042-5)

## INSTRUCTIONS:

TO INSTALL D350-689-017 SHOULDER HARNESS KIT:

1. DRILL Ø0.323 HOLES AS INDICATED ON SHEET 2, DETAIL "A" OF THIS SERVICE INSTRUCTION FOR THE INERTIA REEL.
2. DEBURR AND TOUCH UP DRILLED HOLES AS INDICATED ON IIN-D350-689 SECTION 3.1 ITEM 5 (PG 4).
3. GUIDE SHOULDER HARNESS WEBBING THRU D3031-1 LOOP BY REMOVING LOOP FIRST, POSITIONING WEBBING AND FINALLY REPLACING D3031-1 LOOP. TORQUE FASTENERS TO 15-25 in-lbs.
4. INSTALL INERTIA REEL OF D4071-041 HARNESS ASSY USING THE HARDWARE PROVIDED AS PER FIGURE 1 (SHEET 2). ALIGN INERTIA REEL TO ENSURE WEBBING IS STRAIGHT. TORQUE FASTENERS TO 100-140 in-lbs.
5. REPEAT STEPS 3 & 4 FOR THE SECOND SHOULDER HARNESS.
6. INSTALL D4071-041 LAP BELT ASSY (QTY 2) USING EXISTING HARDWARE PROVIDED WITH D350-689-041/-043 DUAL HIGH BACK SEAT ASSEMBLY. SEE FIGURE 2 (SHEET 2) FOR REFERENCE.






## WEIGHT AND BALANCE:

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-689-017 SHOULDER HARNESS KIT (Seat's Fwd position)	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-kG	60.7 in 1.54 m	267 in-lb 3.08 m-kG
D350-689-017 SHOULDER HARNESS KIT (Seat's Aft position)	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-kG	64.7 in 1.64 m	285 in-lb 3.28 m-kG

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY:   
D. SHEPHERD (DE # 02)

DATE: 10.04.13  
CERT. NO.: SH02-33  
ISSUE NO.: 1

A	NEW ISSUE.	JPH	10.04.13
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9499	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SHOULDER HARNESS KIT	NTS
DATE	10.04.13	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

D350-689-041/-043  
DUAL HIGH BACK  
SEAT ASSEMBLY

D3031-1  
LOOP REFERENCE ONLY

D4071-041  
(SHOULDER HARNESS)

Ø 0.323

0.50

2.25

**DETAIL A**  
PLATE REWORK  
PARTS REMOVED FOR CLARITY

A

A

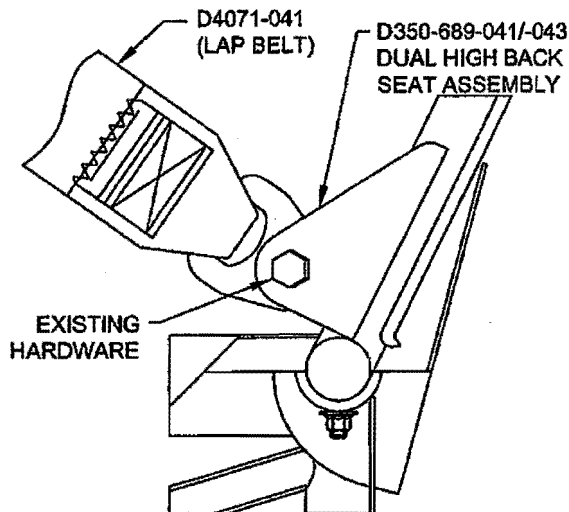
AN5-4A BOLT  
NAS1149D0516J WASHER, 2X  
MS21042L5 NUT

**FIGURE 1**  
**DUAL HIGH BACK SEAT ASSEMBLY**  
**WITH D350-689-017**  
**ONE HARNESS ASSY SHOWN**

USE EXISTING  
HARDWARE TO  
INSTALL LAP  
BELT ASSY

D4071-041  
(LAP BELT ASSY)

**FIGURE 2**  
**DUAL HIGH BACK SEAT ASSEMBLY**  
**WITH D350-689-017**  
**ONE LAP BELT ASSY SHOWN FOR CLARITY**








**SECTION VIEW B-B**  
**LAP BELT ASSY INTL**  
**(ROTATED VIEW)**

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 10.04.13  
CERT. NO.: SH02-33  
ISSUE NO.: 1

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9499	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SHOULDER HARNESS KIT	NTS
DATE	10.04.13	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			